In the Claims

The listing of claims will replace all prior versions and listings of claims in the application.

Listings of claims

1. (Original) A compound of the formula (I), or a pharmaceutically-acceptable salt, or an in-vivo-hydrolysable ester thereof,

$$C$$
 R_1b

wherein C is selected from D and E,

wherein in D and E the phenyl ring is attached to the oxazolidinone in (I); R_1b is $-NR_{25}C(=W)R_{24}$;

wherein W is O or S;

 R_{24} is hydrogen, amino, (2-6C)alkyl (optionally substituted by 1, 2 or 3 substituents independently selected from methyl, chloro, bromo, fluoro, methoxy, methylthio, azido and cyano), methyl (substituted by 1, 2 or 3 substituents independently selected from methyl, chloro, bromo, fluoro, methoxy, methylthio, hydroxy, benzyloxy, ethynyl, (1-4C)alkoxycarbonyl, azido and cyano), 5-halo-2-thienyl, -NHR₂₆, -N(R₂₆)(R₂₇), -OR₂₆ or -SR₂₆, (2-4C)alkenyl, -(1-8C)alkylaryl, per-halo(1-8C)alkyl, -(CH₂)p(3-6C)cycloalkyl or -(CH₂)p(3-6C)cycloalkenyl wherein p is 0, 1 or 2;

 R_{25} is hydrogen, (3-6C)cycloalkyl, phenyloxycarbonyl, tert-butoxycarbonyl, fluorenyloxycarbonyl, benzyloxycarbonyl, (1-6C)alkyl (optionally substituted by cyano or (1-4C)alkoxycarbonyl), $-CO_2R_{28}$, $-C(=O)R_{28}$, $-C(=O)SR_{28}$, $-C(=S)R_{29}$, $P(O)(OR_{29})(OR_{30})$ and $-SO_2R_{31}$, wherein R_{28} , R_{29} , R_{30} and R_{31} are as defined hereinbelow;

R₂₈ is hydrogen, (3-6C)cycloalkyl, phenyl, benzyl, (1-5C)alkanoyl, (1-6C)alkyl (optionally

substituted by substituents independently selected from (1-5C)alkoxycarbonyl, hydroxy, cyano, up to 3 halogen atoms and -NR $_{15}$ R $_{16}$ (wherein R $_{15}$ and R $_{16}$ are independently selected from hydrogen, phenyl (optionally substituted with one or more substituents selected from halogen, (1-4C)alkyl and (1-4C)alkyl substituted with one, two, three or more halogen atoms) and (1-4C)alkyl (optionally substituted with one, two, three or more halogen atoms), or for any N(R $_{15}$)(R $_{16}$) group, R $_{15}$ and R $_{16}$ may additionally be taken together with the nitrogen atom to which they are attached to form a pyrrolidinyl, piperidinyl or morpholinyl ring));

 R_{29} and R_{30} are independently selected from hydrogen and (1-4C)alkyl;

 R_{31} is (1-4C)alkyl or phenyl;

 R_{26} and R_{27} are independently selected from hydrogen, phenyl (optionally substituted with one or more substituents selected from halogen, (1-4C)alkyl and (1-4C)alkyl substituted with one, two, three or more halogen atoms) and (1-4C)alkyl (optionally substituted with one, two, three or more halogen atoms), or for any $N(R_{26})(R_{27})$ group, R_{26} and R_{27} may additionally be taken together with the nitrogen atom to which they are attached to form an unsubstituted or substituted pyrrolidinyl, piperidinyl or morpholinyl ring, which ring may be optionally substituted by a group selected from (1-4C)alkyl, (3-6C)cycloalkyl, (1-4C)alkanoyl, -COO(1-4C)alkyl, -S(O)n(1-4C)alkyl (wherein n = 1 or 2), -COOAR1, -CS(1-4C)alkyl and -C(=S)O(1-4C)alkyl;

 R_2a and R_6a are independently selected from H, CF₃, OMe, SMe, Me and Et; R_2b and R_6b are independently selected from H, F, Cl, CF₃, OMe, SMe, Me and Et; R_3a is selected from H, (1-4C)alkyl, cyano, Br, F, Cl, OH, (1-4C)alkoxy, -S(O)_n(1-4C)alkyl (wherein n = 0,1,or 2), amino, (1-4C)alkylcarbonylamino, nitro, -CHO, -CO(1-4C)alkyl, -CONH₂ and -CONH(1-4C)alkyl;

R₄ is selected from R₄a and R₄b wherein

 R_4a is selected from azido, -NR₇R₈, OR₁₀, (1-4C)alkyl, (1-4C)alkoxy, (3-6C)cycloalkyl, -(CH₂)_k-R₉, AR1, AR2, (1-4C)alkanoyl, -CS(1-4C)alkyl, -C(=W)NRvRw [wherein W is O or S, Rv and Rw are independently H, or (1-4C)alkyl], -(C=O)_I-R₆, -COO(1-4C)alkyl, -C=OAR1, -C=OAR2, -COOAR1, S(O)n(1-4C)alkyl (wherein n = 1 or 2), -S(O)pAR1, -S(O)pAR2 and -C(=S)O(1-4C)alkyl; wherein any (1-4C)alkyl chain may be optionally substituted by (1-4C)alkyl, cyano, hydroxy or halo; p = 0,1 or 2;

R₄b is selected from HET-3;

 R_6 is selected from hydrogen, (1-4C)alkoxy, amino, (1-4C)alkylamino and hydroxy(1-4C)alkylamino;

k is 1 or 2;

I is 1 or 2:

R₇ and R₈ are independently selected from H and (1-4C)alkyl, or wherein R₇ and R₈ taken

together with the nitrogen to which they are attached can form a 5-7 membered ring optionally with an additional heteroatom selected from N, O, S(O)n (wherein n = 1 or 2) in place of 1 carbon atom of the so formed ring; wherein the ring may be optionally substituted by one or two groups independently selected from (1-4C)alkyl, (3-6C)cycloalkyl, (1-4C)alkanoyl, -COO(1-4C)alkyl, -S(O)n(1-4C)alkyl (wherein n = 1 or 2), AR1, AR2, , -C=OAR1, -C=OAR2, -COOAR1, -CS(1-4C)alkyl, -C(=S)O(1-4C)alkyl, -C(=W)NRvRw [wherein W is O or S, Rv and Rw are independently H, or (1-4C)alkyl], -S(O)pAR1 and -S(O)pAR2; wherein any (1-4C)alkyl, (3-6C)cycloalkyl or (1-4C)alkanoyl group may be optionally substituted (except on a carbon atom adjacent to a heteroatom) by one or two substituents selected from (1-4C)alkyl, cyano, hydroxy, halo, amino, (1-4C)alkylamino and di(1-4C)alkylamino; p=0,1 or 2;

R₉ is independently selected from R₉a to R₉d below:

R₉a: AR1, AR2, AR2a, AR2b, AR3, AR3a, AR3b, AR4, AR4a, CY1, CY2;

R₉b: cyano, carboxy, (1-4C)alkoxycarbonyl, -C(=W)NRvRw [wherein W is O or S, Rv and Rw are independently H, or (1-4C)alkyl and wherein Rv and Rw taken together with the amide or thioamide nitrogen to which they are attached can form a 5-7 membered ring optionally with an additional heteroatom selected from N, O, S(O)n in place of 1 carbon atom of the so formed ring; wherein when said ring is a piperazine ring, the ring may be optionally substituted on the additional nitrogen by a group selected from (1-4C)alkyl, (3-6C)cycloalkyl, (1-4C)alkanoyl, -COO(1-4C)alkyl, -S(O)n(1-4C)alkyl (wherein n = 1 or 2), -COOAR1, -CS(1-4C)alkyl and -C(=S)O(1-4C)alkyl; wherein any alkyl, alkanoyl or cycloalkyl may itself optionally be substituted by cyano, hydroxy or halo)], ethenyl, 2-(1-4C)alkylethenyl, 2-(1-4C)alkyl)ethenyl, 2-(1-4C)alkyl

2-((1-4C)alkoxycarbonyl)ethenyl, 2-(AR1)ethenyl, 2-(AR2)ethenyl, 2-(AR2a)ethenyl;

R₉c: (1-6C)alkyl

{optionally substituted by one or more groups (including geminal disubstitution) each independently selected from hydroxy, (1-10C)alkoxy, (1-4C)alkoxy-(1-4C)alkoxy, (1-4C)alkoxy-(1-4C)alkoxy, (1-4C)alkoxy-(1-4C)alkoxy-(1-4C)alkoxy-(1-4C)alkoxy, (1-4C)alkylcarbonyl, phosphoryl [-O-P(O)(OH)2, and mono- and di-(1-4C)alkoxy derivatives thereof], phosphiryl [-O-P(OH)2 and mono- and di-(1-4C)alkoxy derivatives thereof], and amino; and/or optionally substituted by one group selected from carboxy, phosphonate [phosphono, -P(O)(OH)2, and mono- and di-(1-4C)alkoxy derivatives thereof], phosphinate [-P(OH)2 and mono- and di-(1-4C)alkoxy derivatives thereof], cyano, halo, trifluoromethyl, (1-4C)alkoxycarbonyl, (1-4C)alkoxy-(1-4C)alkoxy-(1-4C)alkoxycarbonyl, (1-4C)alkylamino, di((1-4C)alkyl)amino, (1-6C)alkanoylamino-, (1-4C)alkoxycarbonylamino-, N-(1-4C)alkyl-N-(1-4C)alkyl)amino, (1-6C)alkanoylamino-, (1-4C)alkoxycarbonylamino-, N-(1-4C)alkyl-N-(1-4C)alkylamino-, N-(1-4C)alkyl-N-(1-4C)alkylamino-, N-(1-4C)alkyl-N-(1-4C)alkylamino-, N-(1-4C)alkyl-N-(1-4C)alkylamino-, N-(1-4C)alkyl-N-(1-4C)alkylamino-, N-(1-4C)alkyl-N-(1-4C)alkylamino-, N-(1-4C)alkyl-N-(1-4C)alkylamino-, N-(1-4C)alkyl-N-(1-4C)alkylamino-, N-(1-4C)alkyl-N-(1-4C)alkylamino-, N-(1-4C)alkyl-N-

6C)alkanoylamino-, -C(=W)NRvRw [wherein W is O or S, Rv and Rw are as hereinbefore defined], (=NORv) wherein Rv is as hereinbefore defined, (1-4C)alkylS(O)_pNH, (1-4C)alkylS(O)_p-((1-4C)alkyl)N-, fluoro(1-4C)alkylS(O)_pNH-, fluoro(1-4C)alkylS(O)_p- ((1-4C)alkyl)N-, (1-4C)alkylS(O)_q-, CY1, CY2, AR1, AR2, AR3, AR1-O-, AR2-O-, AR3-O-, AR1-S(O)_q-, AR2-S(O)_q-, AR3-S(O)_q-, AR1-NH-, AR2-NH-, AR3-NH- (p is 1 or 2 and q is 0, 1 or 2), and also AR2a, AR2b, AR3a and AR3b versions of AR2 and AR3 containing groups}; wherein any (1-4C)alkyl present in any substituent on R₉c may itself be substituted by one or two groups independently selected from cyano, hydroxy, halo, amino, (1-4C)alkylamino and di(1-4C)alkylamino, provided that such a substituent is not on a carbon adjacent to a heteroatom atom if present;

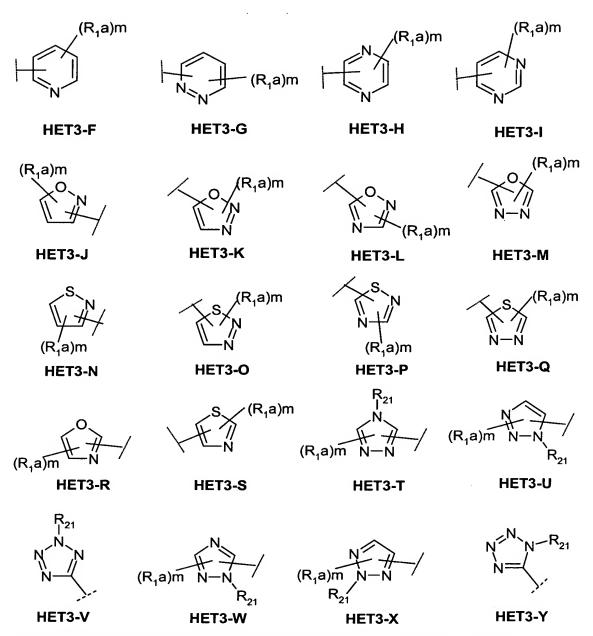
 R_9d : $R_{14}C(O)O(1-6C)$ alkyl- wherein R_{14} is AR1, AR2, (1-4C)alkylamino, benzyloxy-(1-4C)alkyl or (1-10C)alkyl {optionally substituted as defined for (R_9c)}; R_{10} is selected from hydrogen, R_9c (as hereinbefore defined), (1-4C)alkanoyl and (1-4C)alkylsulfonyl;

HET-3 is selected from:

a) a 5-membered heterocyclic ring contining at least one nitrogen and/or oxygen in which any carbon atom is a C=O, C=N, or C=S group, wherein said ring is of the formula HET3-A to HET3-E below:

$$R_{21}$$
 R_{21}
 R_{1}
 R_{21}
 R_{1}
 R_{21}
 R_{21}
 R_{1}
 R_{21}
 R_{21}
 R_{21}
 R_{21}
 R_{21}
 R_{21}
 R_{21}
 R_{22}
 R_{21}
 R_{22}
 R_{22}
 R_{22}
 R_{23}
 R_{24}
 R_{24}
 R_{25}
 R_{2

b) a carbon-linked 5- or 6-membered heteroaromatic ring containing 1, 2, 3, or 4 heteroatoms independently selected from N, O and S selected from HET3-F to HET3-Y below:



c) a nitrogen-linked 5- or 6-membered heteroaromatic ring containing 1, 2, 3, or 4 heteroatoms independently selected from N, O and S selected from HET3-Z to HET3-AH below:

wherein in HET-3, R₁a is a substituent on carbon;

R₁a is independently selected from R₁a1 to R₁a5 below:

R₁a1: AR1, AR2, AR2a, AR2b, AR3, AR3a, AR3b, AR4, AR4a, CY1, CY2;

 R_1a2 : cyano, carboxy, (1-4C)alkoxycarbonyl, -C(=W)NRvRw [wherein W is O or S, Rv and Rw are independently H, or (1-4C)alkyl and wherein Rv and Rw taken together with the amide or thioamide nitrogen to which they are attached can form a 5-7 membered ring optionally with an additional heteroatom selected from N, O, S(O)n in place of 1 carbon atom of the so formed ring; wherein when said ring is a piperazine ring, the ring may be optionally substituted on the additional nitrogen by a group selected from (1-4C)alkyl, (3-6C)cycloalkyl, (1-4C)alkanoyl, -COO(1-4C)alkyl, -S(O)n(1-4C)alkyl (wherein n = 1 or 2), -COOAR1, -CS(1-4C)alkyl) and -C(=S)O(1-4C)alkyl; wherein any (1-4C)alkyl, (1-4C)alkanoyl and (3-6C)cycloalkyl substituent may itself be substituted by cyano, hydroxy or halo, provided that, such a substituent is not on a carbon adjacent to a nitrogen atom of the piperazine ring], ethenyl, 2-(1-4C)alkylethenyl, 2-cyanoethenyl, 2-cyano-2-((1-4C)alkyl)ethenyl, 2-nitroe1-((1-4C)alkyl)ethenyl, 2-((1-4C)alkylaminocarbonyl)ethenyl, 2-((1-4C)alkoxycarbonyl)ethenyl, 2-(AR1)ethenyl, 2-(AR2)ethenyl, 2-(AR2a)ethenyl; R_1 3: (1-10C)alkyl

{optionally substituted by one or more groups (including geminal disubstitution) each independently selected from hydroxy, (1-10C)alkoxy, (1-4C)alkoxy-(1-4C)alkoxy, (1-4C)alkoxy-(1-4C)alkoxy-(1-4C)alkoxy-(1-4C)alkoxy, (1-4C)alkylcarbonyl, phosphoryl [-O-P(O)(OH)₂, and mono- and di-(1-4C)alkoxy derivatives thereof], phosphiryl [-O-P(OH)₂ and mono- and di-(1-4C)alkoxy derivatives thereof], and amino; and/or optionally substituted by one group selected from carboxy, phosphonate [phosphono, -P(O)(OH)₂, and mono- and di-

(1-4C)alkoxy derivatives thereof], phosphinate [-P(OH)2 and mono- and di-(1-4C)alkoxy derivatives thereof], cyano, halo, trifluoromethyl, (1-4C)alkoxycarbonyl, (1-4C)alkoxy-(1-4C)alkoxycarbonyl, (1-4C)alkoxy-(1-4C)alkoxy-(1-4C)alkoxycarbonyl, (1-4C)alkylamino, di((1-4C)alkyl)amino, (1-6C)alkanoylamino-, (1-4C)alkoxycarbonylamino-, N-(1-4C)alkyl-N-(1-6C)alkanoylamino-, -C(=W)NRvRw [wherein W is O or S, Rv and Rw are independently H, or (1-4C)alkyl and wherein Rv and Rw taken together with the amide or thioamide nitrogen to which they are attached can form a 5-7 membered ring optionally with an additional heteroatom selected from N, O, S(O)n in place of 1 carbon atom of the so formed ring; wherein when said ring is a piperazine ring, the ring may be optionally substituted on the additional nitrogen by a group selected from (1-4C)alkyl, (3-6C)cycloalkyl, (1-4C)alkanoyl, -COO(1-4C)alkyl, -S(O)n(1-4C)alkyl (wherein n = 1 or 2), -COOAR1, -CS(1-4C)alkyl and -C(=S)O(1-4C)alkyl], (=NORv) wherein Rv is as hereinbefore defined, (1-4C)alkylS(O)_DNH-, (1-4C)alkylS(O)_D-((1-4C)alkyl)N-, fluoro(1-4C)alkylS(O)_DNH-, fluoro(1-4C)alkylS(O)_D((1-4C)alkyl)N-, (1-4C)alkylS(O)_Q-, CY1, CY2, AR1, AR2, AR3, AR1-O-, AR2-O-, AR3-O-, AR1-S(O)_a-, AR2-S(O)_a-, AR3-S(O)_a-, AR1-NH-, AR2-NH-, AR3-NH- (p is 1 or 2 and q is 0, 1 or 2), and also AR2a, AR2b, AR3a and AR3b versions of AR2 and AR3 containing groups); wherein any (1-4C)alkyl, (1-4C)alkanoyl and (3-6C)cycloalkyl present in any substituent on R₁a3 may itself be substituted by one or two groups independently selected from cyano, hydroxy, halo, amino, (1-4C)alkylamino and di(1-4C)alkylamino, provided that such a substituent is not on a carbon adjacent to a heteroatom atom if present;

 $R_{1}a4$: $R_{14}C(O)O(1-6C)$ alkyl- wherein R_{14} is AR1, AR2, AR2a, AR2b, (1-4C)alkylamino, benzyloxy-(1-4C)alkyl or (1-10C)alkyl {optionally substituted as defined for ($R_{1}a3$)}; $R_{1}a5$: F, CI, hydroxy, mercapto, (1-4C)alkylS(O)p- (p = 0,1 or 2), -NR₇R₈ (wherein R₇ and R₈ are as hereinbefore defined) or -OR₁₀ (where R₁₀ is as hereinbefore defined); m is 0, 1 or 2;

 R_{21} is selected from hydrogen, methyl [optionally substituted with cyano, trifluoromethyl, -C=WNRvRw (where W, Rv and Rw are as hereinbefore defined for R1a3), (1-4C)alkoxycarbonyl, (1-4C)alkoxy-(1-4C)alkoxy

 R_{22} is cyano, -COR₁₂, -COOR₁₂, -CONHR₁₂, -CON(R_{12})(R13), -SO₂R₁₂ (provided that R_{12} is

not hydrogen), $-SO_2NHR_{12}$, $-SO_2N(R_{12})(R_{13})$ or NO_2 , wherein R_{12} and R_{13} are as defined hereinbelow:

R₁₂ and R₁₃ are independently selected from hydrogen, phenyl (optionally substituted with one or more substituents selected from halogen, (1-4C)alkyl and (1-4C)alkyl substituted with one, two, three or more halogen atoms) and (1-4C)alkyl (optionally substituted with one, two, three or more halogen atoms), or for any $N(R_{12})(R_{13})$ group, R_{12} and R_{13} may be taken together with the nitrogen to which they are attached to form a 5-7 membered ring optionally with an additional heteroatom selected from N, O, S(O)n in place of 1 carbon atom of the so formed ring; wherein the ring may be optionally substituted by one or two groups independently selected from (1-4C)alkyl (optionally substituted on a carbon not adjacent to the nitrogen by cyano, hydroxy or halo), (3-6C)cycloalkyl, (1-4C)alkanoyl, -COO(1-4C)alkyl, S(O)n(1-4C)alkyl (wherein n = 1 or 2), AR1, AR2, , -C=OAR1, -C=OAR2, -COOAR1, -CS(1-4C)alkyl, -C(=S)O(1-4C)alkyl, -C(=W)NRvRw [wherein W is O or S, Rv and Rw are independently H, or (1-4C)alkyl], -S(O)pAR1 and -S(O)pAR2; wherein any (1-4C)alkyl chain may be optionally substituted by (1-4C)alkyl, cyano, hydroxy or halo; p = 0,1 or 2; AR1 is an optionally substituted phenyl or optionally substituted naphthyl;

AR2 is an optionally substituted 5- or 6-membered, fully unsaturated (i.e with the maximum degree of unsaturation) monocyclic heteroaryl ring containing up to four heteroatoms independently selected from O, N and S (but not containing any O-O, O-S or S-S bonds), and linked via a ring carbon atom, or a ring nitrogen atom if the ring is not thereby quaternised;

AR2a is a partially hydrogenated version of AR2 (i.e. AR2 systems retaining some, but not the full, degree of unsaturation), linked via a ring carbon atom or linked via a ring nitrogen atom if the ring is not thereby quaternised;

AR2b is a fully hydrogenated version of AR2 (i.e. AR2 systems having no unsaturation), linked via a ring carbon atom or linked via a ring nitrogen atom;

AR3 is an optionally substituted 8-, 9- or 10-membered, fully unsaturated (i.e with the maximum degree of unsaturation) bicyclic heteroaryl ring containing up to four heteroatoms independently selected from O, N and S (but not containing any O-O, O-S or S-S bonds), and linked via a ring carbon atom in either of the rings comprising the bicyclic system; AR3a is a partially hydrogenated version of AR3 (i.e. AR3 systems retaining some, but not the full, degree of unsaturation), linked via a ring carbon atom, or linked via a ring nitrogen atom if the ring is not thereby quaternised, in either of the rings comprising the bicyclic system;

AR3b is a fully hydrogenated version of AR3 (i.e. AR3 systems having no unsaturation), linked via a ring carbon atom, or linked via a ring nitrogen atom, in either of the rings

comprising the bicyclic system;

Rw is hydrogen or (1-4C)alkyl]; and

maximum degree of unsaturation) tricyclic heteroaryl ring containing up to four heteroatoms independently selected from O, N and S (but not containing any O-O, O-S or S-S bonds), and linked via a ring carbon atom in any of the rings comprising the tricyclic system; AR4a is a partially hydrogenated version of AR4 (i.e. AR4 systems retaining some, but not the full, degree of unsaturation), linked via a ring carbon atom, or linked via a ring nitrogen atom if the ring is not thereby quaternised, in any of the rings comprising the tricyclic system; CY1 is an optionally substituted cyclobutyl, cyclopentyl or cyclohexyl ring; CY2 is an optionally substituted cyclopentenyl or cyclohexenyl ring; wherein; optional substituents on AR1, AR2, AR2a, AR2b, AR3, AR3a, AR3b, AR4, AR4a, CY1 and CY2 are (on an available carbon atom) up to three substituents independently selected from (1-4C)alkyl (optionally substituted by substituents selected independently from hydroxy, trifluoromethyl, (1-4C)alkyl S(O)_Q- (q is 0, 1 or 2), (1-4C)alkoxy, (1-4C)alkoxycarbonyl, cyano, nitro, (1-4C)alkanoylamino, -CONRvRw or -NRvRw}, trifluoromethyl, hydroxy, halo, nitro, cyano, thiol, (1-4C)alkoxy, (1-4C)alkanoyloxy, dimethylaminomethyleneaminocarbonyl, di(N-(1-4C)alkyl)aminomethylimino, carboxy, (1-4C)alkoxycarbonyl, (1-4C)alkanoyl, (1-4C)alkylSO₂amino, (2-4C)alkenyl {optionally substituted by carboxy or (1-4C)alkoxycarbonyl, (2-4C)alkynyl, (1-4C)alkanoylamino, oxo (=O), thioxo (=S), (1-4C)alkanoylamino {the (1-4C)alkanoyl group being optionally substituted by hydroxy}, (1-4C)alkyl S(O)q- (q is 0, 1 or 2) {the (1-4C)alkyl group being optionally substituted by one or more groups independently selected from cyano, hydroxy and (1-4C)alkoxy}, -CONRvRw or -NRvRw [wherein Rv is hydrogen or (1-4C)alkyl; Rw is hydrogen or (1-4C)alkyl]; and further optional substituents on AR1, AR2, AR2a, AR2b, AR3, AR3a, AR3b, AR4, AR4a, CY1 and CY2 (on an available carbon atom), and also on alkyl groups (unless indicated otherwise) are up to three substituents independently selected from trifluoromethoxy, benzoylamino, benzoyl, phenyl (optionally substituted by up to three substituents independently selected from halo, (1-4C)alkoxy or cyano}, furan, pyrrole, pyrazole, imidazole, triazole, pyrimidine, pyridazine, pyridine, isoxazole, oxazole, isothiazole, thiazole, thiophene, hydroxyimino(1-4C)alkyl, (1-4C)alkoxyimino(1-4C)alkyl, halo-

(1-4C)alkyl, (1-4C)alkanesulfonamido, -SO₂NRvRw [wherein Rv is hydrogen or (1-4C)alkyl;

optional substituents on AR2, AR2a, AR2b, AR3, AR3a, AR3b, AR4 and AR4a are (on an

available nitrogen atom, where such substitution does not result in quaternization)

AR4 is an optionally substituted 13- or 14-membered, fully unsaturated (i.e with the

- (1-4C)alkyl, (1-4C)alkanoyl {wherein the (1-4C)alkyl and (1-4C)alkanoyl groups are optionally substituted by (preferably one) substituents independently selected from cyano, hydroxy, nitro, trifluoromethyl, (1-4C)alkyl S(O)q- (q is 0, 1 or 2), (1-4C)alkoxy, (1-4C)alkoxycarbonyl, (1-4C)alkanoylamino, -CONRvRw or -NRvRw [wherein Rv is hydrogen or (1-4C)alkyl; Rw is hydrogen or (1-4C)alkyl]}, (2-4C)alkenyl, (2-4C)alkynyl, (1-4C)alkoxycarbonyl or oxo (to form an N-oxide).
- 2. (Currently Amended) The A compound of claim 1 the formula (I) as claimed in claim 1, or a pharmaceutically-acceptable salt or an in-vivo hydrolysable ester thereof, wherein R₁b is -NHC(W)R₂₄.
- 3. (Currently Amended) The A compound of claim 1 the formula (I) as claimed in claim 1 or claim 2, or a pharmaceutically-acceptable salt, or an in-vivo hydrolysable ester thereof, wherein R_4 is R_4 b.
- 4. (Currently Amended) <u>The A compound of claim 1 the formula (I) as claimed in any preceding claim or a pharmaceutically-acceptable salt, or an in-vivo hydrolysable-ester thereof, wherein HET-3 is selected from HET3-T, HET3-V, HET3-Y and HET-3-W.</u>
- 5. (Currently Amended) <u>The A compound of claim 1</u> the formula (I) as claimed in any preceding claim, or a pharmaceutically-acceptable salt, or an in-vivo hydrolysable ester thereof, wherein HET-3 is selected from HET3-V and HET3-Y.
- 6. (Currently Amended) <u>The A compound of claim 1</u> the formula (I) as claimed in any preceding claim, or a pharmaceutically-acceptable salt, or an in-vivo hydrolysable ester thereof, wherein R₁a is R₁a3.
- 7. (Currently Amended) <u>The A compound of claim 1 the formula (I) as claimed in any preceding claim, or a pharmaceutically-acceptable salt, or an in-vivo hydrolysable ester thereof, wherein group C is group D.</u>
- 8. (Currently Amended) The A compound of claim 1 the formula (I) as claimed in claims 1 to 6, or a pharmaceutically-acceptable salt, or an in-vivo hydrolysable ester thereof, wherein group C is group E.
- 9. (Currently Amended) The A compound of claim 1 the formula (I) as claimed in claims

1 to 6, or a pharmaceutically-acceptable salt, or an in-vivo hydrolysable ester thereof, wherein W is O.

10. (Currently Amended) A compound of the formula (Ia), or a pharmaceutically-acceptable salt, or an in-vivo hydrolysable ester thereof, wherein groups C and R₁b have meanings as stated in <u>claim 1</u> any one of the preceding claims.

$$C$$
 R_1
 R_1

- 11. (Currently Amended) A pro-drug of a compound of <u>claim 1</u> as <u>claimed in any one of</u> the preceding claims.
- 12 (Currently Amended) A method for producing an antibacterial effect in a warm blooded animal which comprises administering to said animal an effective amount of a compound of <u>claim 1</u> the invention as claimed in any one of claims 1 to 10, or a pharmaceutically-acceptable salt, or in-vivo hydrolysable ester thereof.
- 13. Cancelled.
- 14. Cancelled.
- 15. (Currently Amended) A pharmaceutical composition which comprises a compound of claim 1 the invention as claimed in any one of claims 1 to 10, or a pharmaceutically-acceptable salt or an in-vivo hydrolysable ester thereof, and a pharmaceutically-acceptable diluent or carrier.
- 16. (Original) A process for the preparation of a compound of formula (I) as claimed in claim 1 or pharmaceutically acceptable salts or in-vivo hydrolysable esters thereof, which process comprises one of processes (a) to (f); and thereafter if necessary:
- i) removing any protecting groups;
- ii) forming a pro-drug (for example an in-vivo hydrolysable ester); and/or

- iii) forming a pharmaceutically-acceptable salt; wherein said processes (a) to (f) are:
- a) by modifying a substituent in, or introducing a substituent into another compound of the invention by using standard chemistry;
- b) by reaction of a molecule of a compound of formula (IIa) [wherein X is a leaving group useful in palladium coupling and in this instance A is either N or $C-R_3a$] with a molecule of a compound of formula (IIb) (wherein X' is a leaving group useful in palladium coupling,) wherein X and X' are such that an aryl-aryl, heteroaryl-aryl, or heteroaryl-heteroaryl bond replaces the aryl-X (or heteroaryl-X) and aryl-X' (or heteroaryl-X') bonds;

$$R_{4} \xrightarrow{R_{2}a} R_{2}b \xrightarrow{Q} N \xrightarrow{R_{1}b} R_{1}b$$
(IIa) (IIb)

and X and X' are chosen to be different lead to the desired cross-coupling products of formula (I);

c) by reaction of a heterobiaryl derivative (III) carbamate [where A is either N or C-R₃a] with an appropriately substituted oxirane to form an oxazolidinone ring;

(d) by reaction of a compound of formula (VI):

$$X \xrightarrow{R_2 a} \xrightarrow{R_2 b} O \\ R_6 a \quad R_6 b$$

$$(VI)$$

where X is a replaceable substituent and A is either N or CR₃a with a compound of the formula (VII):

wherein T-X' is HET3 as herein above defined and X' is a replaceable C-linked substituent - wherein the substituents X and X' are chosen to be complementary pairs of substituents known in the art to be suitable for coupling reactions catalysed by transition metals; or (d(i)) by reaction catalysed by transition metals such as palladium(0) of a compound of formula (VIII):

wherein X is a replaceable substituent and wherein in this instance A is either N or C-R₃a with a compound of the formula (IX):

$$H-N$$
 (IX)

(d(ii)) by reaction of a compound of formula (X):

$$X \xrightarrow{R_2 a} \xrightarrow{R_2 b} O \\ R_6 a \quad R_6 b$$

$$(X)$$

wherein X is a replaceable substituent and wherein in this instance A is either N or C-R₃a with a compound of the formula (XI):

T-H (XI)

wherein T-H is an amine R_7R_8NH , an alcohol $R_{10}OH$, or an azole with an available ring-NH group to give compounds (XIIa), (XIIb), or (XIIc) wherein in this instance A is nitrogen or C- R_3 a and A' is nitrogen or carbon optionally substituted with one or more groups R_1 a.

$$R_{7}R_{8}N \xrightarrow{A} R_{6}a R_{6}b \xrightarrow{R_{1}b} R_{10}O \xrightarrow{R_{2}a R_{2}b} R_{$$

$$A = A'$$

$$A' = A'$$

$$R_{6}a R_{6}b$$

$$(XIIc)$$

(e) by reaction of a compound of formula (XIII):

$$X_1$$
 X_2
 R_6a
 R_6b
 R_1b
 R_1b

wherein X_1 and X_2 here are independently optionally substituted heteroatoms drawn in combination from O, N, and S such that $C(X_1)X_2$ constitutes a substituent that is a carboxylic acid derivative substituent and wherein in this instance A is either N or C-R₃a with a compound of the formula (XIV) and X_3 and X_4 are independently optionally substituted heteroatoms drawn in combination from O, N, and S:

$$R_1 a \xrightarrow{X_3} X_4$$

and wherein one of $C(X_1)X_2$ and $C(X_3)X_4$ constitutes an optionally substituted hydrazide, thiohydrazide, or amidrazone, hydroximidate, or hydroxamidine and the other one of $C(X_1)X_2$ and $C(X_3)X_4$ constitutes an optionally substituted acylating, thioacylating, or imidoylating agent such that $C(X_1)X_2$ and $C(X_3)X_4$ may be condensed together to form a 1,2,4-heteroatom 5-membered heterocycle containing 3 heteroatoms drawn in combination from O, N, and S, for instance thiadiazole; or

(e (i)) by reaction of a compound of formula (XV):

$$R_1aN$$
 X_2
 R_6a
 R_6b
 R_1b
 R_1b

wherein X_2 is a displaceable group and wherein in this instance A is either N or C-R₃a with a source of azide anion to give a tetrazole (XVI)

$$R_1a$$
 R_2a
 R_2b
 R_1b
 R_6a
 R_6b
 R_1b

or where nitriles of formula (XVII)

$$N = \begin{array}{c} R_2 a \quad R_2 b \\ R_6 a \quad R_6 b \end{array}$$
(XVII)

[wherein in this instance A is either N or C-R₃a] may be reacted directly with azides such as ammonium azide or trialkylstannylazides to give tetrazoles (XVI, R₁a = H) that are subsequently alkylated with groups R₁a \neq H to give tetrazoles (XVIIIa) and (XVIIIb) or;

(f) by reaction of a compound of formula (XIX):

$$X_{5}$$
 X_{6}
 X_{7}
 X_{8}
 X_{8}
 X_{8}
 X_{1}
 X_{1}
 X_{2}
 X_{3}
 X_{4}
 X_{5}
 X_{6}
 X_{7}
 X_{7}
 X_{8}
 X_{8

[wherein in this instance A is either N or C-R₃a] with a compound of the formula (XX):

$$R_1 a \longrightarrow X_8$$

wherein one of $C(X_5)X_6$ and $C(X_7)X_8$ constitutes an optionally substituted alpha-(leaving-group-substituted)ketone, wherein the leaving group is for example a halo-group or an (alkyl or aryl)-sulfonyloxy-group, and the other one of $C(X_5)X_6$ and $C(X_7)X_8$ constitutes an optionally substituted amide, thioamide, or amidine, such that $C(X_5)X_6$ and $C(X_7)X_8$ are groups that may

be condensed together to form a 1,3-heteroatom 5-membered heterocycle containing 2 heteroatoms drawn in combination from O, N, and S.